

The Application of Advanced Learning Technology in Assisting The Teaching of Business and Consecutive Interpreting

Saihong Li

The University of Stirling, the United Kingdom

Email: Saihong.li@stir.ac.uk

[Abstract] The present study aims to investigate how to use both existing and emerging technologies effectively to create dynamic and more accessible learning resources to allow both learning and teaching with greater freedom. The use of Smartphones, virtual learning environments (VLEs), podcasting /vodcasting, QR codes, and interactive voting response systems to assist my teaching of business and consecutive interpreting was analyzed as a case study. The results of this study indicate that the students have benefitted from the use of advanced learning technologies without the learning experience actually becoming about learning how to use the technologies themselves.

[Keywords] advanced learning technology; business interpreting; consecutive interpreting

Introduction

The growing influx of computer technology has made possible students' journey to technology-based learning and self-learning. At the same time, it has had reciprocal impacts on knowledge exchange across the world. Learning technology, according to the Association for Learning Technology, is defined as "the broad range of communication, information and related technologies that can be used to support learning, teaching, and assessment." In this study, the application of the advanced learning technologies (ALT) refers to the use of the Smartphones, virtual learning environments (VLEs), podcasting / vodcasting tools, QR codes, and interactive voting response systems in order to develop more innovative ideas in the appropriate use of technologies for learning and teaching.

The present study includes my three-year case study of using the advanced technology in assisting my teaching on Business Interpreting and Consecutive Interpreting courses at the post-graduate level at the University of Salford from 2010 to 2013. Through this research and my own hands-on experimentation, this paper aims to investigate how to effectively use both existing and emerging technologies to create dynamic and more accessible learning resources to allow both learning and teaching with greater freedom. The project itself is centered on my chosen application of ALTs in order to enhance learners' engagement, reflection, and recollection of the topics studied in accordance with the UK Professional Standards Framework.

A podcast is, "a method for distributing any digital media file, or series of files, over the Internet for playback on portable media players, such as Apple iPods and personal computers" (Lazzari, 2009, p. 4). Audio and video podcasts can "provide students with the ability to learn on demand based on their own learning styles" and can also provide a mechanism that motivates students to "actively engage in the course content" (Fisher & Baird, 2006, p. 24). Podcasting has been widely used in teaching economics (Swan & Hofter, 2011), science (Bedrossian, 2010), music (Coutinho & Mota, 2011), and social science (Dlott, 2007), just to list a few. Middleton (2009) presents a wide-ranging discussion of how to encourage academics to design educational audio and to explore creative approaches to the application of learning technology. The author, based his study on a case study at Sheffield Hallam University, discusses the academic staff's responses to the use of a VLE (virtual learning environment) podcasting tool: Podcast LX. The study involves interviewing 25 participants. According to the author, the research method used itself and is "intended to directly affect the design of podcast applications" (p. 147). The article concludes that digital tools, such as video/audio podcasting, have great potential to improve pedagogic creativities, especially in engaging and motivating students' learning. Although the use of technology to support and enhance student learning and assessment is well documented in literature (Hepplestone, et al., 2011); to date few, if any, studies appear to have been carried out within the context of interpreting and translation

studies, especially pertaining to the discussion of the application of Smartphone technology in the teaching of Business Interpreting and Consecutive Interpreting. The aims of this project are to fill this gap and to bring this teaching methodology to further discussion.

Critically important considerations that have arisen during the planning and execution of this project are the questions of standardization, market prevalence, availability, and cost. It is paramount to me that any teaching and learning materials I produce in electronic form are able to be played on a wide range of commonly available and, as far as is reasonably practicable, affordable devices, such as the ubiquitous Apple iPod and similar devices. Using new technologies for technology's sake is a trap that I am mindful not to fall into, as is pricing new and effective learning resources out of the reach of learners through the use of audio visual technologies that can only be accessed via expensive devices. This has become a new challenge for me: to find out whether or how the new technologies work as aids for teaching and, indeed a motivation for carrying out the project. To incorporate the effective use of Smartphones combined with the other advanced technologies in teaching and learning, the present study aims to investigate the following research areas:

1. Whether the use of such technologies might be beneficial in the teaching and learning of interpreting and translation studies.
2. How exactly I might incorporate Smartphones into my teaching, both in my preparation of learning materials and learners' collaborative creation of coursework. This might necessitate guidance or technical support required in order to educate learners in the use of Smartphones.
3. The evaluation of whether any or all of these skills considerations outweigh the benefits to learners' engagement and their learning strategies.

Rationale and Research Background

Although the application of learning and teaching technologies is not really new to me, it is still a big challenge for me to revisit and rethink my own experience of using technology in learning and teaching over the last 20 years. This raises a particular challenge to me for the two postgraduate modules, Business Interpreting (BI) and Consecutive Interpreting (CI).

The Business Interpreting module for post-graduate level is to ensure a high standard of professionalism both in interpreting practice and at the theoretical level. It is "designed to equip the students for work as a bilateral interpreter in the business context" with a focus on "developing bilateral communicative and linguistic skills in order to absorb and render the contents of business negotiations with maximum efficiency" (PG7, 2012, p. 2). Both the BI & CI modules were delivered as two hours each week. The two hours are divided between one live hour in class and one 'lab' hour (self-access structured practice, which will often involve the use of Can8 / Sony Virtuoso software that can be available in the Languages Resource Center. It is the aim of the CI module to consecutively interpret.

To be a good interpreter, not only is fluency in both target and source languages required, but also in the cultural and linguistic differences between the two languages. Interpretation is both an art and a science, requiring very specialized training. Interpreting courses, unlike most other courses, such as business and linguistics courses, are a kind of special training on skill building and practice with critique and analysis; thus, the course is ideally suited to eight people in each training class so that each student can have the chance to do interpreting practice and receive appropriate, immediate feedback from the tutors.

Due to the nature of the profession, an interpreter requires a good memory, quick wits, analytical skills, presentation skills, note-taking skills, assertiveness, and intelligible communication skills. Many of these skills can be developed only with lots of self-learning and ample practice, and the supplemental use of the Smartphone in teaching is to achieve this goal by providing an alternative channel for students' self-learning. The process of using of Smartphones to create video podcasts (also called vodcasts), I believe, will help students to develop 1) memory, presentation and note-taking skills; 2) assertiveness; 3) public

speaking skills; 4) terminology research skills, and 5) most importantly, it allows the students to build on their strengths and work on their weaker areas. In order to carry out the project, I asked 47 students over the last three years and have conducted three identical case studies each year, which includes two stages:

Stage 1: Two assignments

Stage 2: The evaluation questionnaires at the end of the course will be carried out by using Turning Point clickers (please see more in my action plan).

In order to finish these two assignments, I asked the students to use Smartphones to make video recordings of their own interpreting and then podcast their assignments. The students were asked to make a 10-minute video recording, which included the following: 1) English to Chinese interpreting (3-4 minutes). 2) Chinese to English interpreting (3-4 minutes). 3) Self / peer evaluations of their interpreting (2-3 minutes).

I asked the students to create video podcasts, with their Smartphones (I have consulted the students, and they said that they all have some sort of smartphone) to upload video assignments, their own interpreting, and their self/peer feedback after watching their performance, etc. I suggested that the students use Blackboard/YouTube, to podcast their assignments.

In this project, questionnaires supplemented with interviews have been used to investigate the viability of using Smartphones and other technologies in the process of learning and teaching. The questionnaire, as the “most common method of collecting data on attitudes and opinions from a large group of participants” (Mackey & Gass, 2005, p. 92), has been the most popular methodological tool employed for all kinds of research. Interview techniques are useful “for identifying possible areas for more detailed investigation” (Li, 2011, p.72). Interviews are easy to conduct and direct. Gay (1992) views an interview as “essentially the oral, in-person administration of a questionnaire to each member of a sample” (p. 225). There are three types of interview: the structured interview, the semi-structured interview, and the unstructured interview, each of which can generate interesting responses.

The students’ creation of QR codes containing the URL of their podcasts ensured the smooth sharing their assignments. It also enabled me to present, via teaching room PC and projector, all students’ QR codes so that they could simply scan the QR codes using their Smartphones instead of having to laboriously copy each URL manually and then retype into a web-enabled device. This obviates the necessity for the students to manually copy to paper and then type into their Smartphones or other web-enabled devices and allows them to navigate directly to their chosen vodcast, making collaboration and group feedback much easier and more efficient.

The evaluation strategy of this project involves the assessment of oral and written feedback from students in order to evaluate the effectiveness of using Smartphones and to evaluate the students’ satisfaction/dissatisfaction with the supplementary and use of Smartphones as part of the learning and teaching. It is also to investigate the students’ perceptions of using new technologies. Feedback will be collected via interviews (during individual oral feedback) and questionnaires. Turning Point clickers will be used for data collection. Clicker systems are commonly called Classroom Response Systems, Student Response Systems, or Audience Response Systems. They allow instructors to pose questions and gather immediate responses or feedback during a lecture. Answers are stored electronically for later analysis and reporting. Clickers will be more appropriate where learners’ performance is gauged and feedback collected interactively in real time during feedback sessions.

Outcomes & Discussions

I used Turning Point clickers and supplemented them with interviews for the final evaluation. I had initially designed ten questions. The results of the questionnaires and semi-structured interviews can be seen below. The questions were followed by a semi-structured interview, in which the dialogue is steered by the interviewer in accordance with a predetermined but flexible framework of discussion points, and during which the conversation might deviate to some extent from the pre-planned framework.

Questions 1. Do you have a Smartphone? If so, what kinds of Smartphones do you have?

For those particular groups of students, everyone admitted that they have a Smartphone. Figure 1 shows that Smartphones are very popular among PG level students in this cohort. Thirty-seven percent of the students have iPhones. Then come HTC (17%), Sony Ericsson (13%), other kinds of Android phones (13%), Nokia (8%), Samsung (8%), and Blackberry (4%).

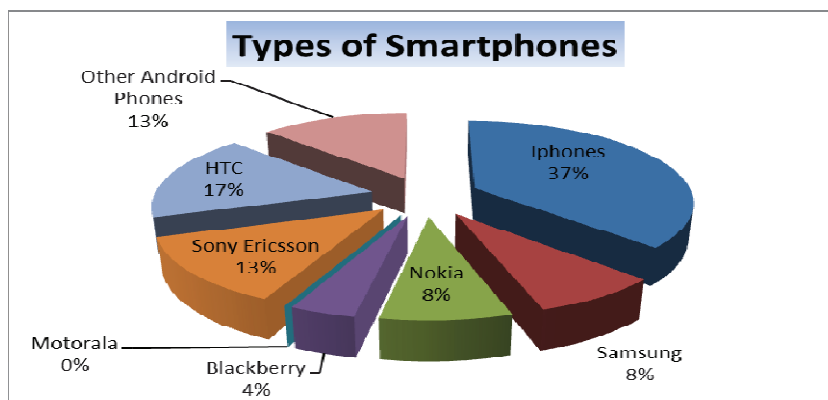


Figure 1. Types of Smartphones

Question 2. Have you used Smartphones or cameras, etc., to do audio or video recording previously? If so, for what purposes?

The areas of activity in the UKPSF provide a, “recognition and accreditation service which enables staff providing teaching and / or learning support to be recognized.” In order to make sure that the students are able to carry out the audio recording and podcasting successfully, I provided learning support to students. It would be ideal if my students and I could gain access to more spoken technical support.

The interview framework was designed to find out the purposes for which the participants would typically make video or audio recordings. The results of the 47 student responses can be seen in Table 1, below. It indicates that all participants have used Smartphones to make video recordings previously, but 55.3 percent of the students have used Smartphones to make audio recordings. They also admitted that they had all tried to make video recordings previously but that only 58 percent had tried audio recording and these students also admitted that they did the recording mostly for fun. Three students had podcasted some of their own recordings before, but mostly on YouTube. To my surprise, no students asked any questions about how to video record their assignments or how to create and upload podcasts and, thus far, no student has mentioned either that he or she does not possess or does not have access to a Smartphone or other suitable device. At this point, I can only assume that all the students have access to Smartphones and that they know how to make a video and then upload it as a podcast/vodcast, either to Blackboard or, maybe, YouTube.

However, I do suspect that many students think they “know,” but how they apply what they “know” may not be the same case. Perhaps, though, our current students are innately more attuned to emerging technologies and their applications, which leads to the cycle that Roschelle describes thus: “every new generation of learning technology brings with it a new deep conceptual issue that learning technologists must untangle in order to unlock the learning value of raw technological potential” (Roschelle, 2003, pp. 260-261). In order to carry out their assignments, I encourage students to use more efficient methods to upload their podcasts to one, specific, publically accessible hosting company, e.g. directly to YouTube or Blackboard, thus avoiding the situation whereby I end up with multiple USB sticks and a swollen inbox, having to sort and review content, all of which could have been done by the individuals themselves.

Table 1

Have You Used Smartphones Or Cameras, to Do Audio Or Video Recording Before?

	Video Recordings			Audio Recordings		
	Camera/Video Recorder	Smartphones	Others	Camera/Video Recorder	Smartphones	Others
Number of Participants	34	47	31	40	26	32
Percentage	72.3%	100%	65.9%	81.5%	55.3%	68.0%

Question 3. Are Smartphones useful in podcasting/vodcasting your BI assignments?

The 5-point Likert scale from 1 = “very useful” to 5 = “not at all useful” was used in this question. Podcasting can “allow an instructor to capture fundamental topics for review while devoting face-to-face time for more discussion, student-led instruction, and other innovative activities” (Lonn & Teasley 2009, p. 88). This question is designed to test the students’ evaluation of the effectiveness of using Smartphones. Figure 2 indicates the students’ evaluation of the effectiveness in learning by using Smartphones. As can be seen from the figure, 17 percent of the students admit that Smartphones are very useful in BI assignments. Seventy-five percent of the students admit that Smartphones are useful. The overall positive answers of “very useful” and “useful” are more than 90 percent. Only 4 percent, 1 student, are not sure about the effectiveness in using Smartphones, and one student thinks it is not useful. The results suggest that the use of Smartphones is widely accepted among learners and has a very positive affect on learning and teaching according to these students. Although some of the technical issues remained to be solved and resolutions to further challenges in teaching and research are still pending, I was very confident in presenting my progress and discussing both the advantages and caveats of using Smartphones to create podcasts in BI & CI teaching. To record and evaluate their own assignments helped the students visualize their potential. The students have demonstrated that they are more aware of how to use Smartphones efficiently and how to podcast their assignments.

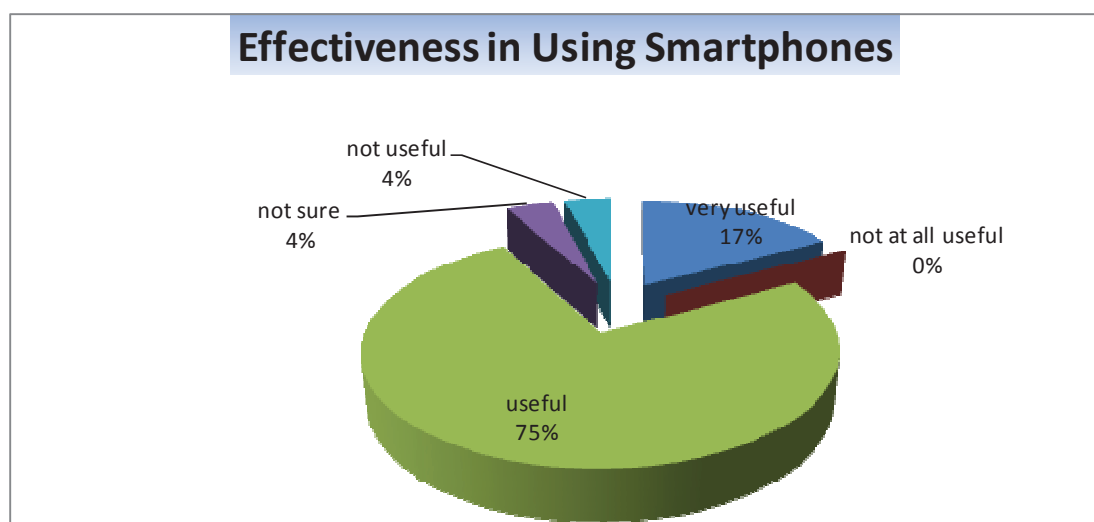


Figure 2. Effectiveness in Using Smartphones

Question 4. In your opinion, what skills can smartphones help you to improve your interpreting skills?

This is a multiple response question in which the participants can choose more than one answer. Table 2 shows the results of the ways in which the students evaluated the use of Smartphones in their learning. Most students believe that the use of Smartphones can help them build on their existing strengths and work on their development areas (97 percent) and linguistics/language skills (89 percent) while building their assertiveness and confidence (34 percent). The students also believe that the use of Smartphones can improve their presentation skills (56 percent) and public speaking (67 percent). Most students admit, in their interviews, that it was a big challenge for them to do the interpreting right in front of the video cameras. Although it was only himself/herself in front of camera, students are still very nervous and sometimes lack confidence. Another challenge is how to self-review their own interpretation products or how to give their peer reviews to their classmates.

Table 2

What Skills Can Smartphones Help You To Improve Your Interpreting Skills?

Linguistic/language skills	89%
Memory	25%
Note-taking skills	10%
Presentation	56%
Publish speech skills	67%
Confidence	90%
Assertiveness	34%
Discover my own strength and weakness	97%
Group/team work	
Commutative skills	
Others	

Question 5. What problems have you encountered of using Smartphones in vodcasting your BI assignments?

This is a semi-structured question. The students listed the following problems in using Smartphones to vodcast their assignments. The following table shows that the students have encountered various kinds of problems in using Smartphones, especially in vodcasting their assignments. It is interesting to note that all students reported at least some difficulty in uploading their work to BB, mainly due to default user permissions, which are intended to minimize security risks. These are able to be changed administratively, however, and might not present an issue in the forthcoming rollout of BB9. For this reason, the use of QR codes, which was suggested by Dave Watson at ITS, was an efficient way to solve this problem.

Table 3

Problems Encountered In Use of Smartphones in Vodcasting Your BI Assignments

Forget to save the audio files	2%
BB doesn't work/allow me to podcast/vodcast my assignments	24%
Don't know how to podcast/vodcast my assignments to BB	10%
The files are too big	9%
Stop half way during my recording	4%
Can't upload to BB or YouTube	8%
Poor resolution of my phone camera	3%
Poor mobile networks	6%
Out of battery	1%
Reliability	4%
Others	5%

Question 6. Among the three sections of your assignments, which section do you think is the most challenging for you?

The experiments in this study, as discussed above, include three sections: Section 1 is translation from English into Chinese, Section 2 is translation from Chinese into English, and Section 3 is students' self/peer evaluations of their own interpreting assignments. The 5-point Likert scale from 1 = "very challenging" to 5 = "not at all challenging" was used in this question. Although this question is not directly related to the technology implication in the learning process, this question helped me gather information about their strengths and weaknesses – it also helped me build my teaching focus. The results in Figure 3 indicate that Section 1 shows two directions: some students think it is very challenging, while others think it is not. The results also suggest that the most students think that Section 2, from Chinese into English, is more challenging than from English into Chinese for a Chinese person. Only one student is a native English speaker, and she admits that it is more difficult for her to translate from English into Chinese. Section 3, according to the participants, is the most challenging section.

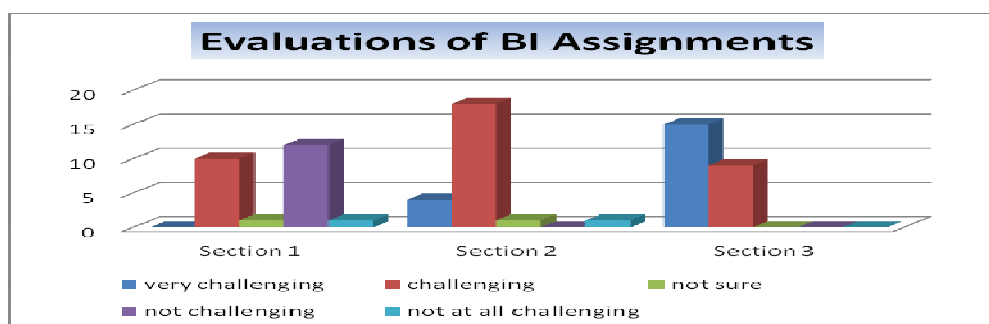


Figure 3. Evaluations of BI assignments

Question 7. What do you like about this course?

This question is an open question and has also been used for the end-of-term course evaluation. For this question, we received many positive comments, such as, "the atmosphere is nice," "the teachers are friendly," "intensive class tempo," "helpful feedback and encouraging," "interesting topics," "good

balance of self-study and in-class teaching,” “face-to-face feedback,” etc. For the purpose of this project, I have listed the feedback related only to my study, as can be seen in Table 4. The results suggest that the students are quite happy with the implementation of new technologies in teaching and learning and that most of them see the advantages of using them.

Table 4

What Do You Like About This Course?

The use of Smartphones as part of the teaching
Podcast/vodcast our assignments are fun and inspiring
New technologies used during the course
It is fun to use the voting response systems - Clickers
Use of QR codes are inspiring and useful
Podcast our Self/peer evaluations
Friendly learning environment throughout the course

Question 8. What do you dislike about this course?

Similar to Question 8, I also asked the students to note down what they dislike about this course. We didn't get many answers to this question, and they are all listed in Table 5; most students are actually really happy with the course. The results indicate that a few students don't like too much technology at one time, although they do like the idea of using Smartphones and vodcasting their assignments. Too much technology at one time, actually, raises the students' concerns, as well as mine, about focusing too much on the technology rather than learning skills. It is a question of achieving a good balance.

Table 5

What Do You Dislike About This Course?

Too much technologies to learn
Should be more teaching based, no self-learning
More business oriented
Should be 2 teaching hours rather than 1 hour per week

Conclusion

In conclusion, the results and the 47 students' final stage evaluations, carried out with the aid of Turning Point clickers, indicate that the students were quite satisfied with the supplementary and use of Smartphones as part of the teaching. For this particular group of students, Smartphones were very popular, and they were widely accepted among learners. Most students believe that the use of Smartphones can help them to build on their existing strengths and work on their development areas while building their assertiveness and confidence. The students also believe that the use of Smartphones can improve their presentation and public speaking skills and are, thus, helpful in paving their way to becoming professional interpreters. According to the students, the use of QR codes in the learning process was not only useful but also inspiring. In the future, we will try to put more resources online so that the students can do more practice at home and make it more challenging for those at a higher level. All of the above-mentioned learning and teaching experiences lead to the very positive and satisfactory evaluations of the two modules.

I believe that the students' general satisfaction does reflect the extent to which they have integrated and become familiar with new technologies during the course of this project, such as podcasting / vodcasting, virtual learning environments (Blackboard VLE), QR codes, and the acquisition, installation, and operation of QR code reader software, different audio / video encoding standards, Smartphone technologies, and interactive voting response systems (Turning Point clickers). In other types of projects, it might be disappointing to note that students made little fuss about technologies or systems involved in a trial. In this project, however, a measure of success of the project is the students' perception of the technologies involved as almost incidental to the project itself. In the same way, the results can be compared to students who might frequently use a pencil as a tool during their learning experiences but not become concerned at any point as to how they should use the pencil or whether or not they might be able to perform the same functions with a different brand of pencil.

They might, however, pick up the pencil and use it to record, in their own way, a critical concept that they just learned, never giving a second thought to the pencil itself. That is one of the aims of this project and, thus, also an encouraging measure of its success, demonstrating that the students have benefitted from the use of advanced learning technologies, without the learning experience actually becoming about learning how to use the technologies themselves. This fact, also, demonstrates that the iterative approach taken throughout the project was effective in maintaining a desirable degree of abstraction between the students and the several different technologies, not to mention different proprietary incarnations of each technology employed. The technologies used remained, as intended, simply a means to an end. Thus, the learning experience remained all about the BI and CI, rather than shifting focus to the advanced learning technologies themselves. It is suggested that the use of Smartphones can play a valuable role in the enhancement of HE teaching and learning in both the Business Interpreting and Consecutive Interpreting contexts.

Further and larger-scale research into the innovative and effective use of Smartphones is needed to identify the beneficial effects on students' learning and satisfaction. My study shows that the potential, be it as it is, is out there for us to use both existing and emerging technologies to create dynamic and more accessible learning resources to allow both learning and teaching with greater freedom. This also affords staff and students greater opportunities to study, to research, and to collaborate with each other. The use of Smartphones in BI teaching is, indeed, such a case in point. I shall, therefore, further pursue the answers to the following question in the future: to what extent does the learning process in general – and in particular the learning of a language – depend on technology and to what extent may it be enhanced by it? Just as I have said above, technology provides us with great potential, but we do need to handle it with care. It is like a butterfly in the hand – it is beautiful if it can last.

More importantly, there is little or no cost to the students to experiment with new technologies (with sufficient guidance) compared to the benefit that they might gain in the insight it would provide. With careful planning, adding to the existing capital of educational technology, existing Smartphone technology can make a substantial difference to the university learning experience.

References

- Bach, S., Haynes, P., & Lewis-Smith, J. (2007). *Online learning and teaching in higher education*. Open University Press.
- Beetham, H., & Sharpe, R. (2007). *Rethinking pedagogy for a digital age: Designing and delivering e-learning*. London: Routledge
- Cebeci, Z., & Tekdal, M. (2006) Using podcasts as audio learning objects. *Interdisciplinary Journal of Knowledge and Learning Objects*, 2(2), 47-57.
- Deal, A. (2007). *A teaching with technology white paper – Podcasting*. Retrieved from http://www.cmu.edu/teaching/technology/whitepapers/Podcasting_Jun07.pdf
- Fisher, M., & Baird, D. (2007). Making mLearning work: Utilizing mobile technology for active exploration, collaboration, assessment, and reflection in higher education. *Journal of Education Technology Systems*, 36(1), 24-36. White Plains, N. Y.
- Franklin T., & Van Harmelen, M. (2007). *Web 2.0 for content for learning and teaching in higher*

- education. *JISC*.
- Gay, L. R. (1992). Educational research-competencies for analysis and application. New York: Merrill.
- JISC (n.d.) (2011). e-Learning program. Retrieved from <http://www.jisc.ac.uk/whatwedo/programmes/elearning.aspx>
- Lazzari, M. (2009). Creative use of podcasting in higher education and its effect on competitive agency. *Computers & Education*, 52(1), 27-34.
- Lonn, S., & Teasley, S. (2009). Podcasting in higher education: What are the implications for teaching and learning? *Internet and Higher Education*, 12(1), 88-92.
- Mackey, A., & Gass, S. M. (2005). *Second language research: Methodology and design*. New Jersey: Lawrence Erlbaum Associates, Inc. Publishers.
- Middleton, A. (2009). Beyond podcasting: Creative approaches to designing educational audio by ALT-J: *Research in Learning Technology*, 17(2), 143-155.
- Rasmussen, S. L. (2011). To define and inform: An analysis of information provided in dictionaries used by learners of English in China and Denmark. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Roschelle, J. (2003). Keynote paper: Unlocking the learning value of wireless mobile devices. *Journal of Computer Assisted Learning*, 19, 260-274.
- Pitt, L. F., & Parent, M., (Eds). (2011). Integrating the smartphone into a sound environmental information systems strategy: Principles, practices and a research agenda. *Journal of Strategic Information Systems*, 20(1), 27-37.
- The University of Salford. (2010-2013). PG7 business interpreting “Module Handbook” Retrieved from <http://vle.salford.ac.uk/webapps/portal>.